

SEQUENCE LISTING

<110> Bennett, Clarence Frank
Vickers, Timothy A.
ISIS PHARMACEUTICALS, INC.

<120> Oligonucleotide Compositions and Methods for the
Modulation of the Expression of B7 Protein

<130> ISPH-0459

<150> 09/326,186
<151> 1999-06-04

<150> 08/777,266
<151> 1996-12-31

<160> 224

<170> PatentIn Ver. 2.0

<210> 1
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 1
gatcagggtta ccaggagcct taggaggtac gg 32

<210> 2
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 2
gatagcctcg agttatttcc aggtcatgag cca 33

<210> 3
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 3
ttccagggtca tgagccatta 20

<210> 4
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

21

<400> 4
cataagggtgt gctctgaagt g

<210> 5
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 5
ttactcatgg taatgtcttt

20

<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 6
attaaaaaca tgtatcactt

20

<210> 7
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 7
ggaacacaga agcaaggtgg t

21

<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 8
ccgtacctcc taaggctcct

20

<210> 9
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 9
cccatagtgtc tgtcacaaat

20

<210> 10
<211> 20
<212> DNA
<213> Artificial Sequence

<220>		
<223> Synthetic		
<400> 10		20
gcacagcagc attcccaagg		
<210> 11		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 11		20
ttgcaaattg gcatggcagg		
<210> 12		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 12		20
tggtatggc tttactcttt		
<210> 13		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 13		20
aaaaggttgc ccaggaacgg		
<210> 14		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 14		20
gggagtccctg gagccccctt		
<210> 15		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 15		20
ccattaagct gggcttggcc		
<210> 16		
<211> 20		

<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 16	20	
tgcgagctcc ccgtacacctcc		
<210> 17		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<300>		
<310> US 5514788		
<311> 1993-05-17		
<312> 1996-05-07		
<400> 17	20	
gcccaagctg gcatccgtca		
<210> 18		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 18	20	
ggattgccaa gcccatggtg		
<210> 19		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 19	20	
ctaagtatgtg ctagccggga		
<210> 20		
<211> 38		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 20	38	
gatcagggtta ccccaaagaa aaagtgattt gtcattgc		
<210> 21		
<211> 35		
<212> DNA		
<213> Artificial Sequence		

<220>		
<223> Synthetic		
<400> 21		35
gatagcctcg aggataatga attggctgac aagac		
<210> 22		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 22		20
gggttaagact ccacttctga		
<210> 23		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 23		20
gggtctccaa aggtttgtgga		
<210> 24		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 24		20
gttcctgggt ctccaaaggt		
<210> 25		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 25		20
acacacagag attggagggt		
<210> 26		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 26		20
gctcacgtag aagaccctcc		
<210> 27		
<211> 20		

<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 27		20
ggcagggctg atgacaatcc		
<210> 28		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 28		20
tgc当地acag gcagggctga		
<210> 29		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 29		20
agaccaggc acttcccagg		
<210> 30		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 30		20
cctgcctccg tgtgtggccc		
<210> 31		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 31		20
gaccagccag caccaagagc		
<210> 32		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 32		20
ccacaggaca gcgttgccac		

<210> 33		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 33	20	
ccggttcttg tactcgggcc		
<210> 34		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 34	20	
ccaaccagga gaggtgaggc		
<210> 35		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 35	20	
ggcaaaggcag taggtcaggc		
<210> 36		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 36	20	
gcctcatgat ccccacgatc		
<210> 37		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 37	20	
agtctacta ccagccgcct		
<210> 38		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		

<400> 38	20
tcagggttaag actccacttc	
<210> 39	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 39	20
agggttgtcc tgggtctcca	
<210> 40	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 40	20
ctccgtgtgt ggcccatggc	
<210> 41	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 41	20
ggatgggtgat gttccctgcc	
<210> 42	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 42	20
tgagaaaagac cagccagcac	
<210> 43	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 43	20
gggcgcagag ccaggatcac	
<210> 44	
<211> 20	
<212> DNA	
<213> Artificial Sequence	

<220>		
<223> Synthetic		
<400> 44		20
ggcccaggat gggagcagg		
<210> 45		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 45		20
agggcgata ctttcccttc		
<210> 46		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 46		20
cagcccccttg cttctgcgg		
<210> 47		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 47		20
aaggagaggg atgccagcca		
<210> 48		
<211> 22		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 48		22
ctgttacttt acagagggtt tg		
<210> 49		
<211> 25		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 49		25
cttctgttac tttacagagg gtttg		
<210> 50		
<211> 21		

<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 50	21	
ctgttacttt acagagggtt t		
<210> 51		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 51	20	
gccctcgtca gatgggcgca		
<210> 52		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 52	20	
agtccctacta ccagccgcct		
<210> 53		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 53	20	
agtaaagatc tattgaggta		
<210> 54		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 54	20	
ggttgagttt cacaacctga		
<210> 55		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 55	20	
gtccacagaa tggaacagag		

<210> 56		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 56	20	
ggcatccacc cggcagatgc		
<210> 57		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 57	20	
tggatggcat ccacccggca		
<210> 58		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 58	20	
aggcacctcc taggctcaca		
<210> 59		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 59	20	
gccaatggag cttaggcacc		
<210> 60		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 60	20	
catgatgggg aaagccagga		
<210> 61		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		

T G G C G A T T C G T T G G G G G

<400> 61	20
aattgcaaggc catagcttca	
<210> 62	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 62	20
cggcaaggca gcaataccctt	
<210> 63	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 63	20
cccagcaatg acagacagca	
<210> 64	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 64	20
ggtctgaaag gaccaggccc	
<210> 65	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 65	20
tgggaaaccc ccggaagcaa	
<210> 66	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 66	20
ggctttggga aaccccccggaa	
<210> 67	
<211> 19	
<212> DNA	
<213> Artificial Sequence	

<220>		
<223> Synthetic		
<400> 67		19
tcagattcag gatctggga		
<210> 68		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 68		20
cccaggtgaa gtcctctgac		
<210> 69		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 69		20
ctgcgccgaa tcctgccccca		
<210> 70		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 70		20
caggcccgaa ggtaaggctg		
<210> 71		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 71		20
tcagctagca cggtgctgaa		
<210> 72		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 72		20
ggcccgccgaa acttgcccgat		
<210> 73		
<211> 20		

<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 73	20	
ccaccacagt gggctcagcc		
<210> 74		
<211> 19		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 74	19	
ggccatgagg gcaatctaa		
<210> 75		
<211> 21		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 75	21	
gtggccatga gggcaatcta a		
<210> 76		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 76	20	
gatttaacat ttggcgccca		
<210> 77		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 77	20	
aaagttacaa cattatatct		
<210> 78		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 78	20	
agtgcgattc tcaaacctac		

<210> 79
 <211> 16
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic

 <400> 79 tatttgcgag ctcccc 16

<210> 80
 <211> 15
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic

 <400> 80 tatttgcgag ctccc 15

<210> 81
 <211> 14
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic

 <400> 81 tatttgcgag ctcc 14

<210> 82
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic

 <400> 82 cgacagctcc tgcgctcctc 20

<210> 83
 <211> 16
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic

 <400> 83 agctccccgt acctcc 16

<210> 84
 <211> 16
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic

<400> 84	16
tgcgagctcc ccgtac	
<210> 85	
<211> 10	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 85	10
ctccccgtac	
<210> 86	
<211> 11	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 86	11
gctccccgt a c	
<210> 87	
<211> 12	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 87	12
agctccccgt ac	
<210> 88	
<211> 13	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 88	13
gagctccccc tac	
<210> 89	
<211> 14	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 89	14
cgagctcccc gtac	
<210> 90	
<211> 15	
<212> DNA	
<213> Artificial Sequence	

<220>		
<223> Synthetic		
<400> 90		15
gcgagctccc cgtac		
<210> 91		
<211> 13		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 91		13
gcgagctccc cgt		
<210> 92		
<211> 15		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 92		15
gccggccgcca agtct		
<210> 93		
<211> 24		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 93		24
gagaagcaaa gctttcaccc tgttg		
<210> 94		
<211> 22		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 94		22
gaagcaaagg tttcacccctg tg		
<210> 95		
<211> 19		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 95		19
gcaaaggctt caccctgtg		
<210> 96		
<211> 24		

<212> DNA <213> Artificial Sequence <220> <223> Synthetic <400> 96 ctccccgtac ctcctaaggc tcct	24
<210> 97 <211> 22 <212> DNA <213> Artificial Sequence <220> <223> Synthetic <400> 97 ccccgtacct cctaaggctc ct	22
<210> 98 <211> 19 <212> DNA <213> Artificial Sequence <220> <223> Synthetic <400> 98 ccgtacacct taaggctcc	19
<210> 99 <211> 32 <212> DNA <213> Artificial Sequence <220> <223> Synthetic <400> 99 gatcagggta ccaagagtgg ctccctgtagg ca	32
<210> 100 <211> 32 <212> DNA <213> Artificial Sequence <220> <223> Synthetic <400> 100 gatagcctcg aggtagaatt ccaatcagct ga	32
<210> 101 <211> 20 <212> DNA <213> Artificial Sequence <220> <223> Synthetic <300> <302> Blocking of Heart Allograft Rejection by Intercellular	

Adhesion Molecule-1 Synthetic Alone or
in Combination with Other Immunosuppressive Modalities
<303> J. Immunol.
<304> 153
<306> 5336-5346
<307> 1994-12-01

<400> 101
tgcatccccc aggccaccat

20

<210> 102
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<300>
<302> Blocking of Heart Allograft Rejection by Intercellular
Adhesion Molecule-1 Synthetic Alone or
in Combination with Other Immunosuppressive Modalities
<303> J. Immunol.
<304> 153
<306> 5336-5346
<307> 1994-12-01

<400> 102
gcccgagggtcc atgtcgtagc c

21

<210> 103
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 103
acacgtctac aggagtctgg

20

<210> 104
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 104
caagccatg gtgcatactgg

20

<210> 105
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 105
ctggggtcca tcgtgggtgc

20

<210> 106 <211> 20 <212> DNA <213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 106 ccgtgctgcc tacaggagcc	20
<210> 107 <211> 20 <212> DNA <213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 107 ggtgcttccg taagttctgg	20
<210> 108 <211> 20 <212> DNA <213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 108 ggattgccaa gcccatggtg	20
<210> 109 <211> 20 <212> DNA <213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 109 ctaagtatgt ctagccggga	20
<210> 110 <211> 20 <212> DNA <213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 110 tgcgtctcca cggaaacagc	20
<210> 111 <211> 20 <212> DNA <213> Artificial Sequence	
<220>	
<223> Synthetic	

<400> 111	20
gtgcggccca ggtacttggc	
<210> 112	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 112	20
acaaggagga gggccacagt	
<210> 113	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 113	20
tgagaggttt ggaggaaatc	
<210> 114	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 114	20
gatagtctct ctgtcagcgt	
<210> 115	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 115	20
gttgctgggc ctgctaggct	
<210> 116	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 116	20
ctaggtctcg tcgtcggtgg	
<210> 117	
<211> 20	
<212> DNA	
<213> Artificial Sequence	

<220>		
<223> Synthetic		
<400> 117		20
tctcactgcc ttcactctgc		
<210> 118		
<211> 21		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 118		21
gtaccagatg aaggatatca a		
<210> 119		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 119		20
ctttggagat tattcgagtt		
<210> 120		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 120		20
gcaagtgtaa agccctgagt		
<210> 121		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 121		20
agaattccaa tcagctgaga		
<210> 122		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 122		20
tctgagaaac tctgcacttc		
<210> 123		
<211> 20		

<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 123	20	
tcctcaggct ctcactgcct		
<210> 124		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 124	20	
ggttgttcaa gtccgtgctg		
<210> 125		
<211> 21		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 125	21	
gccgaggtcc atgtcgtagc c		
<210> 126		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 126	20	
agactccact tctgagatgt		
<210> 127		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 127	20	
tgaagaaaaa ttccacaaaa		
<210> 128		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 128	20	
tttagttca cagcttgctg		

<210> 129		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 129	20	
tcccggtgc aaaacaggca		
<210> 130		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 130	20	
gtgaaagcca acaatttggaa		
<210> 131		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 131	20	
catggcttca gatgcttagg		
<210> 132		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 132	20	
ttgaggtatg gacacttgga		
<210> 133		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 133	20	
gcgttgccac ttctttcact		
<210> 134		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		

TOESEGEGEGEGEGEG

<400> 134	20
ttttgccagt agatgcgagt	
<210> 135	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 135	20
ggccatatat tcatgtcccc	
<210> 136	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 136	20
gccaggatca caatggagag	
<210> 137	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 137	20
gtatgtgccc tcgtcagatg	
<210> 138	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 138	20
ttcagccagg tgttcccgct	
<210> 139	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 139	20
ggaagtcaagc tttgactgat	
<210> 140	
<211> 20	
<212> DNA	
<213> Artificial Sequence	

<220>		
<223> Synthetic		
<400> 140		20
cctccagagg ttgagcaaat		
<210> 141		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 141		20
ccaaccagga gaggtgaggc		
<210> 142		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 142		20
gaagctgtgg ttgggttgtca		
<210> 143		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 143		20
ttgaaggctt gattcactct		
<210> 144		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 144		20
aaggtaatgg cccaggatgg		
<210> 145		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 145		20
aagcagtagg tcaggcagca		
<210> 146		
<211> 20		

TCGCTGCGTCTGTTGAG

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 146 20
ccttgcttct gcggacactg

<210> 147
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 147 20
agcccccgtgc ttctgcggac

<210> 148
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 148 20
tgacggaggc taccttcaga

<210> 149
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 149 20
gtaaaacagc ttaaaatttgt

<210> 150
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 150 20
agaagagggtt acatthaagca

<210> 151
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 151 20
agataaatgaa ttggctgaca

<210> 152
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 152
 gcgtcatcat ccgcaccatc

20

<210> 153
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 153
 cgttgcttgt gccgacagtg

20

<210> 154
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 154
 gctcacgaag aacaccccttcc

20

<210> 155
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 155
 agagaaaacta gtaagagtct

20

<210> 156
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 156
 tggcatccac ccggcagatg

20

<210> 157
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 157 tcgagaaaca gagatgtaga	20
<210> 158 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Synthetic	
<400> 158 tggagcttag gcacccctcta	20
<210> 159 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Synthetic	
<400> 159 tggggaaagc caggaatcta	20
<210> 160 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Synthetic	
<400> 160 cagcacaaag agaagaatga	20
<210> 161 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Synthetic	
<400> 161 atgaggagag ttgttaacggc	20
<210> 162 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Synthetic	
<400> 162 aagtcccggtt cttatactcg	20
<210> 163 <211> 20 <212> DNA <213> Artificial Sequence	

<220>		
<223> Synthetic		
<400> 163		20
gcaggttaatc ctttttagtgt		
<210> 164		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 164		20
gtgaaggctt ctgacacgtg		
<210> 165		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 165		20
cgaatcctgc cccaaagagc		
<210> 166		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 166		20
actgcgccga atcctgcccc		
<210> 167		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 167		20
tttatgtatca caacgtatgc		
<210> 168		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 168		20
ctgttgtttt tttctctgtct		
<210> 169		
<211> 20		

<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 169		20
tgttcagcta atgcttcttc		
<210> 170		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 170		20
gttaactcta tcttgtgtca		
<210> 171		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 171		20
tccacttcag tcatacgca		
<210> 172		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 172		20
tgctcaatac tctttttta		
<210> 173		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 173		20
aggcccagca aacttgcccg		
<210> 174		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 174		20
aacggcaagg cagcaatacc		

<210> 175	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 175	20
cagaagcaag gtggtaagaa	
<210> 176	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 176	20
gcctgtccac tgttagctcca	
<210> 177	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 177	20
agaatgttac tcagtcccat	
<210> 178	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 178	20
tcagaggagc agcaccagag	
<210> 179	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 179	20
tggcatggca ggtctgcagt	
<210> 180	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	

<400> 180	20
agctcactca ggctttggtt	
<210> 181	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 181	20
tgcctaagta tacctcattc	
<210> 182	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 182	20
ctgtcaaatt tctctttgcc	
<210> 183	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 183	20
catatacttg gaatgaacac	
<210> 184	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 184	20
ggtccaactg tccgaatcaa	
<210> 185	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 185	20
tatatctgaag attgtgaagt	
<210> 186	
<211> 20	
<212> DNA	
<213> Artificial Sequence	

<220>		
<223> Synthetic		
<400> 186		20
aagcccttgt ctttgatctg		
<210> 187		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 187		20
tgtatggat gatacattga		
<210> 188		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 188		20
tcagggttgc tgaagtttagc		
<210> 189		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 189		20
gtgtatagat gagcaggta		
<210> 190		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 190		20
tctgtgacat tatcttgaga		
<210> 191		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 191		20
aagataaaag ccgcgtcttg		
<210> 192		
<211> 20		

<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 192		20
agaaaaaccat cacacatata		
<210> 193		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 193		20
agagttgcga ggccgcttct		
<210> 194		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 194		20
tccctctcca ttgtgttggt		
<210> 195		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 195		20
catcagatct ttcaggata		
<210> 196		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 196		20
ggctttactc tttaattaaa		
<210> 197		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 197		20
gaaatcaaaa aggttgccca		

<210> 198
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 198
 ggagtcctgg agccccctta

20

<210> 199
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 199
 ttggcatacg gagcagagct

20

<210> 200
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 200
 tgtgctctga agtaaaaaga

20

<210> 201
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 201
 ggcttggccc ataagtgtgc

20

<210> 202
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 202
 cctaaatttt atttccaggt

20

<210> 203
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 203	20
gctccaagg tcccaatgaa	
<210> 204	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 204	20
agtatgttcc tcactccgat	
<210> 205	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> control oligonucleotide	
<400> 205	20
tgcacgacc cggtaacgtcc	
<210> 206	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 206	20
gctgcctaca ggagccactc	
<210> 207	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 207	20
tcaaggccgt gctgcctaca	
<210> 208	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic	
<400> 208	20
gtctacagga gtctgggtgt	
<210> 209	
<211> 20	
<212> DNA	
<213> Artificial Sequence	

<220>		
<223> Synthetic		
<400> 209		20
agcttgcgtc tccacggaaa		
<210> 210		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 210		20
tcacactatc aagtttctct		
<210> 211		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 211		20
gtcaaagctc gtgcggccca		
<210> 212		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 212		20
gtgaagtctgt agagtccagt		
<210> 213		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 213		20
gtgacacctgc tttagacgtgc		
<210> 214		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 214		20
catcttctta ggtttcgggt		
<210> 215		
<211> 20		

<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 215		20
ggctgttgg a gatactgaac		
<210> 216		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 216		20
gggaatgaaa gagagaggct		
<210> 217		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 217		20
acataacaatg atgagcagca		
<210> 218		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 218		20
gtctctctgt cagcgttact		
<210> 219		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 219		20
tgc caagccc atggtgcatc		
<210> 220		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> Synthetic		
<400> 220		20
gcaatttggg gttcaagttc		

<210> 221
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 221
caatcagctg agaacatttt 20

<210> 222
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 222
ttttgtataa aacaatcata 20

<210> 223
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 223
ccttcactct gcatttggtt 20

<210> 224
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 224
tgcatgttat caccatactc 20